

WHAT IS CLAIMED IS:

1. A switching regulator comprising:

a first terminal for inputting an output voltage of the switching regulator;

a reference voltage source for generating a reference voltage;

a voltage divider circuit for dividing the output voltage of the switching regulator;

an error amplifier for inputting the reference voltage and an output signal of the voltage divider circuit;

a first circuit block having one resistance, for outputting a signal that varies depending on a resistance value of the resistance;

a second circuit block having a square wave oscillator, for outputting a signal based on an output signal of the square wave oscillator and an output signal of the first circuit block;

a third circuit block having a logic circuit for receiving the output signal of the square wave oscillator and the output signal of the second circuit block to output a signal, and a circuit for outputting an output signal which is controlled based on an output of the logic circuit; and

a comparator for receiving an output of the error amplifier and the output signal of the third circuit block to output a signal.